## ABSTRACT OF THE DISCLOSURE

The present invention provides a system and method for diagnostics execution in which diagnostics code is stored in a designated partition on a removable nonvolatile memory device, such as a compact flash or a personal computer (PC) card that is interfaced with the motherboard of a file server system. The file server system firmware is programmed in such a manner that, upon receipt of a diagnostics command, a normal boot mechanism is interrupted, and a diagnostics boot is performed. The firmware is programmed to probe the removable nonvolatile memory device, and to load the diagnostics code contained thereon into main memory and to execute the diagnostics in response to an initiation by an operator's key sequence. In accordance with a further aspect of the invention, the data produced as a result of the diagnostics test sequence is captured and stored in a maintenance log in another partition on the compact flash that has been pre-assigned for that purpose. Such diagnostics log data can be readily retrieved at a later time. In addition, the diagnostics code may be updated without system downtime.